

CLAIMS

What is claimed is:

1. A food bar for arthritis comprising per food bar:
 - a. from about 250 mg to about 2500 mg of a member selected from the group consisting of 2-amino-2-deoxyglucose sulfate; 2-amino-2-deoxyglucose sulfate hydrochloride; n-acetyl 2-amino-2-deoxyglucose sulfate; and combinations thereof;
 - b. from about 200 mg to about 2000 mg of a protein;
 - c. from about 10 mg to about 8000 mg of a flavoring;
 - d. from about 100 mg to 2500 mg of a vitamin selected from the group consisting of Vitamin B, Vitamin C, Vitamin E, complexes thereof, and combinations thereof; and
 - e. from about 1000 mg to 9000 mg of a fiber.
2. The food bar of claim 1, wherein the food bar comprises from about 1000 mg to about 2000 mg by weight of the member selected from the group consisting of 2-amino-2-deoxyglucose sulfate; 2-amino-2-deoxyglucose sulfate hydrochloride; n-acetyl 2-amino-2-deoxyglucose sulfate; and combinations thereof.
3. The food bar of claim 1, wherein the food bar comprises from about 1200 mg to about 1500 mg by weight of the member selected from the group consisting of 2-amino-2-deoxyglucose sulfate; 2-amino-2-deoxyglucose sulfate hydrochloride; n-acetyl 2-amino-2-deoxyglucose sulfate; and combinations thereof.
4. The food bar of claim 1, wherein the protein is selected from the group consisting of a whey protein, soy protein, sodium casienate protein, legume protein, egg protein, and combinations thereof.
5. The food bar of claim 1, further comprising from about 10 mg to about 20 mg of a fat.

6. The food bar of claim 5, wherein the fat is selected from the group consisting of a saturated fat, a polysaturated fat, a monosaturated fat, a polyunsaturated fat, and combination thereof.
- 5 7. The food bar of claim 6, wherein the monosaturated fat is a fatty acid derived from a member of the group consisting of pumpkin seed, almonds, sesame seeds, walnuts, flax seed, soy bean derivatives, and combinations thereof.
8. The food bar of claim 1, further comprising from about 250 mg to about 5000 mg of an artificial sweetener or a sugar.
- 10 9. The food bar of claim 8, wherein the artificial sweetener is selected from the group consisting of aspartame, saccharine, calcium saccharine, and combinations thereof.
10. The food bar of claim 8, wherein the sugar is selected from the group consisting of dextrose, maple sugar, cane sugar, beet sugar, fructose, sucrose, and combinations thereof.
- 15 11. The food bar of claim 1, wherein the flavoring comprises: a raspberry flavoring, chocolate flavoring, vanilla flavoring, strawberry flavoring, apple flavoring, citrus flavoring, kiwi flavoring, banana flavoring, coconut, caramel flavoring, grape flavoring, blueberry flavoring, peanut, almond flavoring, tart cherry flavoring, coffee flavoring, cinnamon, ginger, nutmeg, clove, ginger, peach flavoring, pear flavoring, other herbs, and combinations thereof.
- 20 12. The food bar of claim 1, further comprising at least one additional ingredient selected from the group consisting of a fruit ingredient, a nut ingredient, a flavor ingredient, a spice ingredient, a vegetable ingredient, and combinations thereof.
- 25 13. The food bar of claim 1, wherein the Vitamin B is selected from the group consisting of Vitamin B1, Vitamin B3, Vitamin B5, Vitamin B6, Vitamin B-12, and combinations thereof.

14. The food bar of claim 1, wherein the Vitamin C is selected from the group consisting of ascorbic acid, sodium ascorbate, potassium ascorbate, a calcium ascorbate with at least one threonate, and combinations thereof.
- 5 15. The food bar of claim 1, wherein the Vitamin E is selected from the group consisting of tocopherol, tocopheryl tocopheryl acetate, d-alpha tocopherol, d-alpha tocopheryl acetate, d-alpha tocopheryl succinate, complexes thereof, and combinations thereof.
16. The food bar of claim 1, wherein the fiber is a grain or a flax seed.
17. The food bar of claim 16, wherein the grain is selected from the group consisting of a corn, a rice, a wheat, a barley, oats, quinoa, and combinations thereof.
- 10 18. The food bar of claim 1, further comprising from about 50 mg to about 800 mg of a naturally produced sulfur compound.
19. The food bar of claim 18, wherein the sulfur compound is methyl sulfonyl methane (MSM).
- 15 20. The food bar of claim 1, further comprising from about 1 mg to about 20 mg of a mineral selected from the group consisting of selenium, a boron, a manganese, a magnesium, or combinations thereof.
21. The food bar of claim 1, further comprising from about 1 mg to about 20 mg of a digestive enzyme.
- 20 22. The food bar of claim 21, wherein the digestive enzyme is selected from the group consisting of bromelain, pepsin, amylase, protease, lipase, cellulase, lactase, alpha-g, glucoamylase, invertase, malt diastase, pectinase, xylanase, bromelain, betain, trypsin, and combinations thereof.
23. The food bar of claim 1, further comprising from about 250 mg to about 500 mg of a calcium.

- 24. The food bar of claim 1, further comprising from about 250 mg to about 1500 mg of Vitamin A.
- 25. The food bar of claim 24, wherein the Vitamin A is beta carotene.
- 26. The food bar of claim 24, wherein the Vitamin A is derived from fish oil.
- 5 27. The food bar of claim 1, further comprising from about 250 to about 1000 mg of chondroitin.
- 28. The food bar of claim 1, further comprising from about 10 mg to about 500 mg of a bioflavonoid from the group consisting of quercetin, grape seed extract, and combinations thereof.
- 10 29. A method for improving joint mobility in a subject comprising administering to a subject an amount of the food bar of claim 28.
- 30. A method for improving joint mobility in a subject in need thereof comprising the step of administering to the subject an amount of the food bar of claim 1.
- 31. The food bar of claim 1, wherein the food bar is prepared by baking.
- 15 32. The food bar of claim 1, wherein the food bar is an extruded food bar.